

B. Rejection of Claims 1-14 Under 35 U.S.C. § 101

The Office action rejected claims 1-14 for allegedly not being directed to patentable subject matter. The Office alleges in support of this rejection that the claimed inventions are not directed to or within the technological arts.

In response, applicants draw attention to the limitations in claim 1 of “generating a plurality of actual induced distortions in the material as a function of the simulated induced distortions; and performing the weld process on the material.” These limitations represent actual, physical steps to be performed on some tangible matter. The physical steps, including welding, are clearly within the technological arts.

The other independent claims 8, 10, and 14 also include limitations which constitute physical steps to be performed on some tangible matter, and also similarly include welding.

In sum, the claims are directed to processes where some of the subprocesses include the manipulation of tangible matter. The Office action requires that all the subprocesses should either be directed to the manipulation of tangible matter, or be expressed as computer-implemented subprocesses. The Office action is correct that the subprocesses which are not directed to the manipulation of tangible matter have not been expressed as computer-implemented subprocesses. However, the Office action does not cite to any authority which establishes that all subprocesses in a process claim must be either directed to the manipulation of tangible matter, or be computer-implemented subprocesses. To the contrary, the current authority clearly establishes that a process claim which is directed in part to the manipulation of tangible matter and has an appropriate utility is patentable subject matter under 35 U.S.C. § 101.

If, for any reason, this rejection is maintained, applicants respectfully request that appropriate and additional authority be cited to further explain for the applicants’ benefit the basis of the rejection, and further explain the position of the U.S. Patent and Trademark Office with respect to these types of claims.

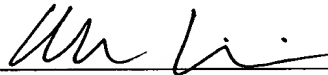
III. Conclusion

The Office action set a three month shortened statutory period for reply expiring on September 15, 2005. This reply is being submitted before the expiration of the reply period.

Any necessary fees, required now or at any time during the pendency of this application may be withdrawn from the undersigned's deposit account no. 03-1129.

If any issues remain to be resolved before this application can be allowed, the examiner is invited and encouraged to contact the undersigned for a telephone conference and an expeditious resolution.

Respectfully submitted,



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